# A Springsnail

# Pyrgulopsis robusta

Gastropoda — Neotaenioglossa — Hydrobiidae

### **CONSERVATION STATUS / CLASSIFICATION**

Rangewide: Imperiled/Vulnerable (G2G3)

Statewide: Critically imperiled (S1)

ESA: No status

USFS: Region 1: No status; Region 4: No status

BLM: Threatened, Endangered, Proposed, and Candidate

(Type 1)

IDFG: Not classified

#### **BASIS FOR INCLUSION**

Habitat degradation rangewide; interspecific competition with introduced mollusks

### **TAXONOMY**

On the basis of molecular evidence, Hershler and Liu (2004) placed the Idaho springsnail (*P. idahoensis*), the Harney Lake springsnail (*P. hendersoni*), and an undescribed taxon from the Columbia River Basin in synonymy with the Jackson Lake springsnail (*P. robusta*) (Hershler and Liu 2004).

#### DISTRIBUTION AND ABUNDANCE

This aquatic snail occurs in scattered localities in Idaho, Wyoming, Oregon, and Washington. In Idaho, this species occurs in the Snake River from Homedale to Weiser and in the lower reaches of some major tributaries, such as the Bruneau River.

# **POPULATION TREND**

Population trend is largely undocumented. At the time of listing (i.e., 1992) populations were thought to be declining precipitously. Investigations conducted since then have revealed a broader distribution than previously recognized. Analysis of available data by USFWS is ongoing.

# **HABITAT AND ECOLOGY**

The Jackson Lake springsnail inhabits riverine habitats. Individuals occur on mud or sand, often among gravel and boulder substrates (Taylor 1982b, U.S. Fish and Wildlife Service 1995). Low densities of macrophytes and epiphytic algae characterize occupied habitat (Frest 1999).

# **ISSUES**

The loss of suitable aquatic habitat and competition with introduced mollusks are thought to be the principal threats to populations. Agriculture, freshwater aquaculture, and urban and residential development have affected water quality. Impoundments and hydroelectric operations have affected flow and temperature regimes and sediment

deposition patterns. Altered conditions have favored introduced mollusk competitors, particularly the New Zealand mudsnail (Frest 1999).

### RECOMMENDED ACTIONS

A recovery plan has been developed for the federally listed snails occurring in the Snake River, which includes this species. Objectives of the plan include protection of the remaining free-flowing mainstem and cold-water spring habitats in occupied reaches of the Snake River, stabilization of water levels, improvement of water quality, augmentation of flows above Milner Dam, and control of exotic species (U. S. Fish and Wildlife Service 1995). U. S. Fish and Wildlife Service has also implemented a monitoring program. Increasing, self-sustaining colonies at monitoring sites over a 5-year period are required for recovery.

# A Springsnail Pyrgulopsis robusta **Ecological Section Point Locations**



